



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

October 30, 2003

100 North Senate Avenue
P.O. Box 6015
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(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Shell Oil Products U.S. (Gary) / 089-17716-00113

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 9/16/03

October 30, 2003

Mr. Sam Brenneke
Shell Oil Products U. S. (Gary)
2258 Grissom Drive
St. Louis, MO 63146

Dear Mr. Brenneke:

Re: Exempt Construction and Operation Status,
089-17716-00113

The application from Shell Oil Products U. S. (Gary), received on April 17, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission unit, to be located at 3501 Broadway, Gary, IN 46408, is classified as exempt from air pollution permit requirements:

- (a) One (1) soil vapor extraction system for decontamination of petroleum contaminated soil, with an average air flow rate of 37.0 scfm.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Any modification at the source that may increase the potential to emit of VOCs or a combination of HAPs to 25 tons per year or more, or single HAP to 10 tons per year or more, shall require prior approval of the Office of Air Quality.

This exemption is the first air approval issued to this source.

Shell Oil Products U. S. (Gary)
Gary, Indiana

Page 2 of 2
Exemption No. 089-17716-00113

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

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cc: File - Lake County
Lake County Health Department
Northwest Regional Office
Air Compliance - Rick Massoels/Ramesh Tejuja
Permit Tracking
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Exemption

Source Background and Description

Source Name:	Shell Oil Products U. S. (Gary)
Source Location:	3501 Broadway, Gary, IN 46408
County:	Lake
SIC Code:	8999
Exemption No.:	089-17716-00113
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed an application from Shell Oil Products U.S. relating to the construction and operation of a groundwater and soil remediation facility.

New Emission Units and Pollution Control Equipment

The source consists of the following new facilities/units:

- (a) One (1) soil vapor extraction system for decontamination of petroleum contaminated soil, with an average air flow rate of 37.0 scfm.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on April 17, 2003.

Emission Calculations

Source submitted data based on soil vapor extraction remedial design testing.

Average air flow = 37 scfm

Average VOC mass loading = 1.52E-03 g/liter of air

Potential to Emit of VOCs = Potential to Emit of HAPs (including benzene, toluene, ethylbenzene,

xylenes)

$$= 1.52 \text{ E-03 g/liter} \times 37 \text{ cu ft/min} \times 1 \text{ liter/1000 cm}^3 \times 1 \text{ cm}^3/3.53\text{E-05 ft}^3 = 1.593 \text{ g/min}$$

$$= 1.593 \text{ g/minute} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times 0.001\text{kg/g} \times 2.2 \text{ lb/kg} \times 1 \text{ ton/2000lb} = \mathbf{0.92 \text{ tons/yr}}$$

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	negligible
PM-10	negligible
SO ₂	negligible
VOC	0.9
CO	negligible
NO _x	negligible

HAP's	Potential To Emit (tons/year)
Single HAP	<10
TOTAL	<25

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	moderate non-attainment
SO ₂	attainment
NO ₂	attainment
Ozone	severe non-attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore,

VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as non-attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

- (b) Lake County has been classified as moderate non-attainment for PM-10. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source, located in Lake County severe non-attainment area, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) VOC and NO_x are each less than 25 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offset)

This source, located in Lake County, has potential to emit of VOC below 25 tons per year and PM-10 of less than 100 tons per year, and it is not one of the 28 listed source categories. Therefore, 326 IAC 2-3 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Lake County and the potential to emit of all criteria pollutants is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the soil remediation unit at the source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute

averaging period as determined in 326 IAC 5-1-4 unless otherwise specified in 326 IAC 6-1-10.1.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties: Applicability)

The potential to emit of VOCs is less than 25 tons per year. Therefore, 326 IAC 8-7 does not apply.

326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)

The VOC potential to emit of the soil remediation system is less than the applicability threshold of 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

Conclusion

The construction and operation of the soil remediation facility shall be subject to the conditions of the Exemption No. 089-17716-00113.